

---

# Letters

---

## Maxwell and electrical engineering

Dear Sir — I attended Dr. Alex Wood's lectures on 'Properties of matter' as a first-year student at the Cavendish Laboratory in 1930. He was talking about gas theory and Maxwell's demon and he spent a few moments on Maxwell and the Cavendish. He gave the reason for Maxwell not 'searching for radio waves' as too much work (see article on Maxwell, Sept. 1981 *E&P*, p.648).

The 8th Duke of Devonshire, Chancellor of the University, gave the money to set up the laboratory in memory of Lord George (Henry) Cavendish, another 'all rounder', who worked about 1780 at Chatsworth.

The duties of Maxwell, the first Cavendish Professor, in addition to overseeing the building, setting up the apparatus and courses of the laboratory, included editing and publishing 'The electrical researches of Lord George Cavendish'. The basis of this work was papers which had been lying around for nearly 100 years!

It was not until the early 1970s that I happened to get this book out of the British Library and was able to confirm Alex Wood's observation that Cavendish anticipated Ohm's discovery of Ohm's Law by 50 years. This book has at least 500 pages, so, though I doubt if Alex Wood ever knew Maxwell, his remark about 'too much work' could well be true.

Incidentally, Prof. P.I. Dee of Glasgow University, in a memoir on Lord Kelvin, gives as the reason why Lord Kelvin did not produce the EM theory of light as 'work on the Atlantic cable'. — Yours faithfully,

P. MILLER (M)  
Curdrige Hill, Curdrige  
Southampton SO3 2BD, England  
19th September 1981